

ABSTRACT OF DISCLOSURE

It is possible to obtain sensitivity which can achieve an excellent error rate with a high recording density. There are provided a magnetization free layer which has two opposed main surfaces, one of which is set to be generally parallel to an air bearing surface; an intermediate layer which is formed on an opposite side face of the magnetization free layer from a medium to come in contact with the magnetization free layer; and a pair of magnetization pinned layers which are formed on an opposite side face of the intermediate layer from the magnetization free layer to come in contact with the intermediate layer and extend outwardly. A sense current flows from one magnetization pinned layer to the other magnetization pinned layer through the magnetization free layer.